

MECHANISM FOR IMPROVING THE STRUCTURAL INTEGRITY OF LOW-K FILMS

ABSTRACT OF THE DISCLOSURE

5 According to one embodiment, a method of forming a low-k dielectric composite film is provided. A low-k interconnect dielectric layer is strengthened by forming whiskers in the low-k film. The whiskers are formed simultaneously with the low-k layer. In one embodiment, the low-k structure is removed by heating a volatile matrix film, leaving a whisker residue.

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